

Application Serial No.: 10/663,332
Amdt. dated June 24, 2005
Reply to Office Action of April 7, 2005

LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Canceled)

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Currently Amended) A coil system adapted for an electrodynamic direct linear drive, the coil system comprising a coil arrangement, which bears a plurality of individual coils arranged coaxially in sequence, a board strip extending along the coil arrangement, such board strip having an electrical circuit with predetermined contact making points with which the wire ends of each individual coil are electrically and mechanically contacted on the board strip, and ~~The coil system as set forth in Claim 1, comprising a~~ magnetic return part coaxial to the coil arrangement which possesses a longitudinally extending recess in which the board strip extends.

7. (Original) The coil system as set forth in Claim 6, wherein the magnetic return part is a tubular body surrounding the coil arrangement, such body being longitudinally slotted to form the recess.

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8. (Original) The coil system as set forth in Claim 6, wherein the intermediate spaces between the magnetic return part, the individual coils and the board strip are filled with a potting composition.

9. (Currently Amended) The coil system as set forth in Claim 6 ~~4~~, wherein the individual coils are coils with bonding enamel.

10. (Currently Amended) A coil system adapted for an electrodynamic direct linear drive, the coil system comprising a coil arrangement, which bears a plurality of individual coils arranged coaxially in sequence and a board strip extending along the coil arrangement, such board strip having an electrical circuit with predetermined contact making points with which the wire ends of each individual coil are electrically and mechanically contacted on the board strip, and ~~The coil system as set forth in Claim 4,~~ wherein the individual coils are centered on an electrically non-conductive tube extending through the coil arrangement.

11. (Currently Amended) The coil system as set forth in Claim 6 ~~4~~, wherein the individual coils are identical with each other.

12. (Currently Amended) The coil system as set forth in Claim 6 ~~4~~, wherein axially adjacent individual coils at least in part touch one another.

13. (Canceled)

14. (Currently Amended) An electrodynamic direct linear drive comprising a first component in the form of a stator and a second component in the form of an output drive part movable ~~able to be moved~~ linearly in relation to the stator, one of the components being fitted with a coil system comprising a coil arrangement, which bears a plurality of individual coils arranged coaxially in sequence, a board strip extending along the coil arrangement, such

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board strip having an electrical circuit with predetermined contact making points with which the wire ends of each individual coil are electrically and mechanically contacted on the board strip, and a magnetic return part coaxial to the coil arrangement which possesses a longitudinally extending recess in which the board strip extends ~~designed as set forth in Claim 4~~ and the other component being fitted with a magnet system comprising ~~comprises~~ one of more axially sequentially placed permanent magnets.

15. (Canceled)

16. (Original) An electrodynamic direct linear drive as set forth in Claim 14, wherein the magnet system and the coil system are placed coaxially one within the other.

17. (New) The coil system as set forth in Claim 6, wherein the board strip is rigid or at least partly flexible in structure.

18. (New) The coil system as set forth in Claim 6, wherein the board strip possesses contact making holes arranged in sequence in the longitudinal direction of the board strip, which are placed in a circuit by printed wiring on the board strip in accordance with a predetermined circuit pattern and into which the wire ends of the individual coils are inserted and soldered to the electrical circuit.

19. (New) The coil system as set forth in Claim 6, wherein the circuit is so constituted that the individual coils are connected together in a plurality of coil groups.

20. (New) The coil system as set forth in Claim 6, wherein the board strip lies against an outer periphery of the coil arrangement.